

SAFETY DATA SHEETS

This SDS packet was issued with item:

075346747

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070595538 075346853

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075346648

SECTION 1: IDENTIFICATION OF PRODUCT

FORMULA: PROPRIETARY AQUEOUS MIXTURE OF FILM FORMING AND SEPARATING AGENTS FOR USE IN DENTURE PROCESSING.

SYNONYM OR CROSS REFERENCE: DIAMOND D ULTRA-SEP TIN-FOIL SUBSTITUTE

Manufacturer: NATIONAL KEYSTONE

616 Hollywood Ave, Cherry Hill, NJ 08002

Emergency Phone Numbers: (800) 535-5053

Information Contacts: (856) 663-4700

NFPA RATINGS

HEALTH HAZARD:	1
FIRE & EXPLOSION:	0
REACTIVITY:	0
PROTECTION:	A

SECTION 2: HAZARDOUS INGREDIENTS

MATERIAL: PROPRIETARY CO-SOLVENT, LESS THAN 10%.

NATURE OF HAZARD: MILD IRRITANT

SECTION 3: PHYSICAL DATA

MELTING POINT: °F: 32
BOILING POINT: °F: APPROX. 212
VAPOR PRESSURE: (mm Hg): N/A
SPECIFIC GRAVITY: (H₂O=1): 1.1 at 25°C
VAPOR DENSITY: (Air =1): N/A
WATER SOLUBILITY: COMPLETE
PH OF SOLUTION: 8 - 9
PERCENT VOLATILE: GREATER THAN 80%
EVAPORATION RATE: (BuAc =1): AS WATER
APPEARANCE: CLEAR TO SLIGHTLY HAZY, VISCOUS, PALE IVORY OR PINK COLORED LIQUID.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used): NOT FLAMMABLE
FLAMMABLE LIMITS: MATERIAL NON-FLAMMABLE.

FIRE EXTINGUISHING MEDIA: ANY MAY BE USED.

SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARD: NONE. THERMAL DECOMPOSITION MAY LIBERATE IRRITATING FUMES. THE PRODUCT IS SLIPPERY IF SPILLED ON THE FLOOR.

SECTION 5: HEALTH HAZARD

THRESHOLD LIMIT VALUE: NONE ESTABLISHED FOR THIS MIXTURE. 50 PPM ON AEROSOL OF MINOR INGREDIENT.

HEALTH HAZARDS: Effects of overexposure to product.
Skin: PROLONGED CONTACT MAY CAUSE IRRITATION.

Eyes: DIRECT CONTACT MAY CAUSE IRRITATION.

Inhalation: MAY CAUSE IRRITATION OF RESPIRATORY SYSTEM, BUT IS HIGHLY UNLIKELY IN NORMAL LAB USE.

Ingestion: MAY CAUSE GASTROINTESTINAL IRRITATION, AND CNS DEPRESSION (DROWSINESS, DIZZINESS, FATIGUE AND VISUAL DISTURBANCES).

FIRST AID PROCEDURES:

Skin: WASH WELL WITH SOAP AND WATER. IF IRRITATION DEVELOPS CONTACT A PHYSICIAN.

Eyes: FLUSH WITH COOL WATER FOR 15 MIN. IF IRRITATION DEVELOPS OR PERSISTS CONTACT A PHYSICIAN.

Inhalation: IF AFFECTED, REMOVE TO FRESH AIR. IF IRRITATION PERSISTS CONTACT A PHYSICIAN.

Ingestion: GIVE WATER TO DRINK AND INDUCE VOMITING.

CARCINOGENICITY: NO INGREDIENTS IDENTIFIED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY NTP, IARC OR OSHA.

SECTION 6: REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: EXTREME HEAT

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS AND ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: PRODUCTS OF COMBUSTION INCLUDE SMOKE, OXIDES OF CARBON.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 7: SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
MATERIAL MAY BE WIPED UP WITH CLOTH OR PAPER TOWELING AND DISCARDED IN TRASH. RESIDUES MAY BE FLUSHED DOWN LABORATORY DRAIN WITH WATER.

WASTE DISPOSAL METHOD:

RAGS MAY BE DISCARDED IN TRASH, OR LABORATORY QUANTITIES MAY BE FLUSHED DOWN DRAIN WITH WATER.

SECTION 8: PROTECTION INFORMATION

VENTILATION: MECHANICAL (GENERAL) ACCEPTABLE.

SKIN: NOT USUALLY REQUIRED.

EYES: SAFETY GLASSES OR GOGGLES. DO NOT WEAR CONTACT LENSES WHEN HANDLING CHEMICALS.

RESPIRATORY: NONE NEEDED IN NORMAL USE.

OTHER PROTECTIVE EQUIPMENT: EYE-WASH STATION.

SECTION 9: HANDLING AND STORAGE (lab quantities)

KEEP CONTAINERS WELL CLOSED. STORE IN COOL, DRY, WELL VENTILATED AREA. FOR LABORATORY OR OFFICE USE ONLY. KEEP OUT OF REACH OF CHILDREN. AVOID HEAT AND DIRECT SUNLIGHT. NORMAL PRECAUTIONS OF LABORATORY GOOD HOUSEKEEPING PRACTICES SHOULD BE FOLLOWED.

SECTION 10: MISCELLANEOUS INFORMATION

DOT SHIPPING: NO RESTRICTIONS.

Revision Date: 3/06

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, with respect to such information, and we assume no liability resulting from its use or from improper use or handling of the product. Users should make their own investigations to determine the suitability of the information for their particular purposes.

Material Safety Data Sheet

ALUMINUM OXIDE

RUBBER BONDED ABRASIVE DISCS

Page 1 of 6

This Material Safety Data Sheet for Aluminum Oxide Rubber Bonded Abrasive Discs & Wheels covers all of the items listed below:

1. Red Flash Discs and Wheels
2. Dura-Thin
3. High Speed Discs
4. Cutoff Wheels: 1 ½ .025, 1 ½ .040, 1 ¼ .062
5. Mizzy Red Heatless Wheels
6. Mizzy White Heatless Wheels
7. Roughing Discs

See attached sheets for ingredients that are contained in the above products.

Material Safety Data Sheet

ALUMINUM OXIDE

RUBBER BONDED ABRASIVE DISCS

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Grinding Wheel:

A wheel in which abrasive particles are embedded into, and held together by, a matrix or bond.

Purposes:

Remove material (Mounted Stone, Mizzy Heatless Wheel)
Cut material (Cutoff Wheels, Red Flash Discs and Ultra-Thin)
Finish (polish)

Bond Types:

Vitrified Inorganic Bonds
Oxichloride

Resin Organic Bonds
Rubber

Rubber Grades:

Soft Rubber: Pliable, i.e. Rubber Wheels, Kegold Wheels, Clasp Polishers

Hard Rubber: Cutoff Wheels, Separating Discs, Veri-Thin, Ultra-Thin, Dura-Thin, Ultra-Flex, Red Flash, R.F. Finishing Wheels

Abrasive Types:

Aluminum Oxide: (red, brown, white) Primarily used on metallics
Silicon Carbide: (black, green) Primarily used on non-metallics

Contamination:

Silicon carbide abrasive is non-contaminating – cannot cause bubbles. The danger of contamination today is practically negligible since firing is done in a vacuum.

Abrasive Grit Size:

Medium – 90 to 150
Fine – 180 to 240
X Fine – 280 – 320

Operating Speeds:

Wheels are rated in Surface Feet Per Minute (SFM) which is converted to Revolutions Per Minute (RPM).

Rating factors are: Diameter
 Bond Type
 Overhang (mounted & unmounted points)

All Keystone items 1 1/2" diameter and less are rated at 30,000 RPM. Rubber points are rated at 30,000 RPM with a 1/2" overhang or less.

Material Safety Data Sheet

ALUMINUM OXIDE

RUBBER BONDED ABRASIVE DISCS

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Section 1 – Identification of the Substance/Preparation and of the Company/Undertaking

Product Name: ALUMINUM OXIDE RUBBER BONDED ABRASIVE DISCS & WHEELS

MSDS Initial Approval Date: July 2002

Chemical Name:

MSDS Prepared by: S.Rohmer/RMP

Family: Abrasive Products inc: Red Flash Discs & Wheels, Dura-Thin, High Speed Discs, Cutoff Wheels, Knife Edge Wheels, Mizzy Red & White Heatless Wheels

Manufacturer: Keystone Industries

616 Hollywood Av

Cherry Hill, NJ 08002

Product Use:

Emergency Phone Numbers: (800) 535 - 5053

Product #: -- Various

Information Contacts: (856) 663 - 4700

Section 2 - Composition/Information on Ingredients

Chemical Identity	CAS Numbers	EINECS#	INCI Name	Exposure OSHA TWA/STEL	Limits ACGIH TWA/STEL	Carcinogen IARC/NTP/OSHA	%
Aluminum Oxide	1344-28-1			15 mg/m ³	10 mg.m ³	N/A	<80%
Iron Oxide	1309-37-1			15 mg/m ³	10 mg.m ³	N/A	<10%
Titanium Oxide	13463-67-7			15 mg/m ³	10 mg.m ³	N/A	<10%
Acrylonitrile	107-13-1			> 1 ppm		N/A	<.0001%
Butadiene	106-99-0			> 0.02 ppm		N/A	<.0001%
Cashew, nutshell liquid, polymer with formaldehyde and phenol	67700-42-9					N/A	<1%

Hazard Symbols: **Risk Phrases:** **Safety Phrases**

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

This information is based on findings from related or similar materials.

- This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry	Eyes, inhalation
Eye	Dust may irritate eyes.
Skin	Some may experience skin irritation from dust.
Ingestion	No known adverse effects but, ingestion not recommended.
Inhalation	Acute: Coughing, shortness of breath. Chronic: May affect breathing capacity.
Other	Grinding may create elevated sound levels which may affect hearing.
Sub-Chronic Effects	

NOTE: Refer to Section 11, Toxicological Information for Details

Section 4 - First Aid Measures

First Aid for Eye	Wash with large amounts of water. Obtain first aid and medical assistance if needed.
First Aid for Skin	Wash affected areas with soap and water.
First Aid for Inhalation	Remove person to fresh air. Apply artificial respiration as needed. Obtain medical assistance.
First Aid for Ingestion	Obtain medical assistance.

Section 5 - Fire Fighting Measures

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
N/A	LEL: N/A	N/A

Revised Date: 11/15/06 | Replaces Date: 7/2002

Material Safety Data Sheet

ALUMINUM OXIDE RUBBER BONDED ABRASIVE DISCS

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UEL: N/A

Method:

Extinguishing Media: Use water
Fire Fighting Instructions: None
Unusual Hazards: No applicable information found

Section 6 - Accidental Release Measures

Spill or Release Procedures Normal clean-up procedures

Section 7 - Handling and Storage

Handling Normal use – handle with adequate ventilation
Storage Normal dry storage
Explosion Hazard

Section 8 - Exposure Controls / Personal Protective Equipment

Engineering Controls

Personal Protective Equipment

General Local exhaust and ventilation recommended.
Eye/ Face Protection Recommended. See OSHA 29 CFR 1910.133 – Face and Eye Protection
Skin Protection Protective gloves as desired by user.
Respiratory Protection As needed. For approved dust respirators, see OSHA 29 CFR 1910.134 – Respiratory Protection.
Other Protective Clothing or Equipment As needed, hearing protection. See OSHA 29 CFR 1910.215 – Hearing Protection.

Section 9 - Physical and Chemical Properties

Appearance	Odor & Odor Threshold	pH	Specific Gravity (H ₂ O = 1)	Viscosity	% Volatile
Solid, coated abrasive product	May produce odor in use.	N/A	2 - 4		No applicable information found

Boiling Point/ Freezing Point	Decomposition Temperature	Octanol/Water Partitioning Coefficient Log Po/w	Vapor Pressure (mm Hg):	Vapor Density (AIR = 1)	Evaporation Rate (Butyl Acetate = 1)	Ignition	Solubility In Water
No applicable information found			No applicable information found	No applicable information found			Slight

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
N/A	LEL – N/A UEL – N/A	N/A

Section 10 - Stability and Reactivity

Stability:

Stable

Hazardous Decomposition Products:

Dust is generated in use. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components.

Conditions to Avoid:

No applicable information found

Incompatibility (Materials to Avoid):

No applicable information found

Hazardous Polymerization:

Will not occur

Section 11 - Toxicological Information

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity	Irritation - skin	Irritation - Eye

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Sensitization	Mutagenicity	Sub-chronic Toxicity
No toxicological information determined.		

RTECS#:

Section 12 - Ecological Information

Ecotoxicological Information

Acute Toxicity To Fish	Acute Toxicity to Invertebrates	Acute Toxicity to Algae	Bioconcentration	Toxicity to Sewage Bacteria
No ecotoxicological information determined.				

Chemical Fate Information

Biodegradability	
Chemical Oxygen Demand	
No chemical fate information determined	

Environmental Fate Information

Section 13 - Disposal Considerations

Standard landfill methods consistent with applicable Local, State and Federal laws.

Section 14 - Transport Information

Proper Shipping Name:	Not regulated
Identification Number:	
Marine Pollutant:	
Special Provisions:	
Emergency Response Guidebook (ERG) #:	

Section 15 - Regulatory Information

US Federal Regulations

Clean Air Act: HAP/ODS	
Clean Water Act:	
FDA: Food Packaging Status	
Occupational Safety and Health Act	
RCRA	•
SARA Title III: Section 302 (TPQ)	
SARA Title III: Section 302 (RQ)	
SARA Title III: Section 311-312:	Fire hazard – no Pressure hazard – no Reactivity hazard – no Immediate hazard - yes Delayed hazard – no
SARA Title III: Section 313:	None
TSCA Section 8(b): Inventory:	
TSCA Significant New Use Rule:	

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ALUMINUM OXIDE

RUBBER BONDED ABRASIVE DISCS

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State Regulations

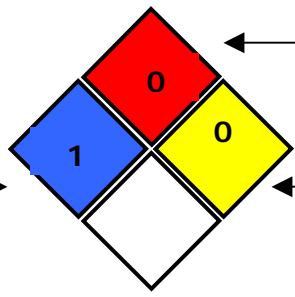
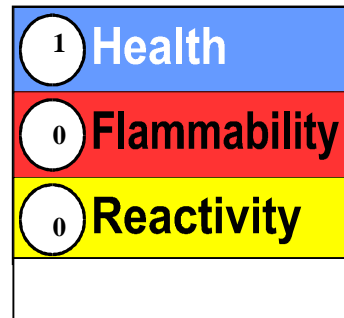
CA Right-to-Know Law:	
California No Significant Risk Rule:	
MA Right-to-Know Law:	
NJ Right-to-Know Law:	
PA Right-to-Know Law:	
FL Right-to-Know Law:	
MN Right-to-Know Law:	

International Regulations

CDSL: Canadian Inventory (On Canadian Transitional List)	
EINECS: European Inventory:	<ul style="list-style-type: none"> HAZARD SYMBOLS:; RISK PHRASES SAFETY PHRASES:

Section 16 - Other Information

Hazard Rating System (Pictograms)

NFPA:		HMIS:	
	<p>Health →</p> <p>← Flammability</p> <p>← Reactivity</p>		

Issue Date: 10/27/05	Review Date: September 2006
Revised Sections since Last Version:	Overall format revision

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Safety Data Sheet

DIAMOND D ULTRA SEP

SECTION 1: IDENTIFICATION OF PRODUCT

PRODUCT NAME: **DIAMOND D ULTRA-SEP TIN FOIL SUBSTITUTE**

PRODUCT CODE: 1010170, 1010175

APPLICATION: PROPRIETARY AQUEOUS MIXTURE OF FILM FORMING AND SEPARATING AGENTS FOR ACRYLIC DENTURE PROCESSING.

SUPPLIER'S DETAILS: Keystone Industries
616 Hollywood Ave.
Cherry Hill, NJ 08002
(856) 663-4700

EMERGENCY CONTACT: **INFOTRAC: 1-352-323-3500, TOLL-FREE 1-800-535-5053**

SECTION 2: HAZARDS IDENTIFICATION (CLASSIFICATION)

WARNING: MILD IRRITANT.



SECTION 2A: PHYSICAL HAZARDS

N/A

SECTION 2B: HEALTH HAZARDS

THRESHOLD LIMIT VALUE: NONE ESTABLISHED FOR THIS MIXTURE. 50 PPM ON AEROSOL OF MINOR INGREDIENT.

SKIN: PROLONGED CONTACT MAY CAUSE IRRITATION.

EYES: DIRECT CONTACT MAY CAUSE IRRITATION.

INHALATION: MAY CAUSE IRRITATION OF RESPIRATORY SYSTEM, BUT IS UNLIKELY IN NORMAL LAB USE.

INGESTION: MAY CAUSE GASTROINTESTINAL IRRITATION, AND CNS DEPRESSION (DROWSINESS, DIZZINESS, FATIGUE AND VISUAL DISTURBANCES).

CARCINOGENICITY: NO INGREDIENT IDENTIFIED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY NTP, IARC OR OSHA.

SECTION 3: COMPOSITION / INGREDIENTS

MIXTURE: ☒ Yes ☐ No

PROPRIETARY CO-SOLVENT, LESS THAN 10%.

SECTION 4: FIRST AID MEASURES

SKIN: WASH WELL WITH SOAP AND WATER. IF IRRITATION DEVELOPS CONTACT A PHYSICIAN.

EYES: FLUSH WITH COOL WATER FOR 15 MIN. IF IRRITATION DEVELOPS OR PERSISTS CONTACT A PHYSICIAN.

INHALATION: IF AFFECTED, REMOVE TO FRESH AIR. IF IRRITATION PERSISTS CONTACT A PHYSICIAN.

INGESTION: GIVE WATER TO DRINK AND INDUCE VOMITING.

SECTION 5: FIREFIGHTING MEASURES

FLASH POINT: NOT FLAMMABLE

FLAMMABLE LIMITS: MATERIAL IS NON-FLAMMABLE.

FIRE EXTINGUISHING MEDIA: ANY MAY BE USED.

SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARD: NONE. THERMAL DECOMPOSITION MAY LIBERATE IRRITATING FUMES. THE PRODUCT IS SLIPPERY IF SPILLED ON THE FLOOR.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PRECAUTIONS: LIQUID MAY BE SLIPPERY IF ON FLOOR.



Safety Data Sheet

DIAMOND D ULTRA SEP

PROCEDURES: MATERIAL MAY BE WIPED UP WITH CLOTH OR PAPER TOWELING AND DISCARDED IN TRASH.
RESIDUES MAY BE FLUSHED DOWN LABORATORY DRAIN WITH WATER.

SECTION 7: HANDLING AND STORAGE (LAB QUANTITIES)

KEEP CONTAINERS WELL CLOSED. STORE IN COOL, DRY, WELL VENTILATED AREA. FOR LABORATORY OR OFFICE USE ONLY. KEEP OUT OF REACH OF CHILDREN. AVOID HEAT AND DIRECT SUNLIGHT. NORMAL PRECAUTIONS OF LABORATORY GOOD HOUSEKEEPING PRACTICES SHOULD BE FOLLOWED.

SECTION 8: EXPOSURE CONTROLS (PERSONAL PROTECTION)

VENTILATION: MECHANICAL (GENERAL) ACCEPTABLE.

SKIN: NOT USUALLY REQUIRED.

EYES: SAFETY GLASSES OR GOGGLES. DO NOT WEAR CONTACT LENSES WHEN HANDLING CHEMICALS.

RESPIRATORY: NONE NEEDED IN NORMAL USE.

OTHER: EYE WASH STATION.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: CLEAR TO SLIGHTLY HAZY, VISCOUS, IVORY OR PINK COLORED LIQUID.

PH OF SOLUTION: 8 - 9

MELTING POINT: °F: 32

BOILING POINT: °F: APPROX. 212

SPECIFIC GRAVITY: (H₂O=1): 1.1 at 25°C

EVAPORATION RATE: (BuAC =1): AS WATER

VAPOR DENSITY: (AIR =1): N/A

PERCENT VOLATILE: GREATER THAN 80%

VAPOR PRESSURE: (mm Hg): N/A

WATER SOLUBILITY: COMPLETE

SECTION 10: REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: EXTREME HEAT

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS AND ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: PRODUCTS OF COMBUSTION INCLUDE SMOKE, OXIDES OF CARBON.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

REACTIVITY WITH WATER: N/A

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE EXPOSURE: SIGNS AND SYMPTOMS:

SKIN: PROLONGED CONTACT MAY CAUSE IRRITATION

EYES: DIRECT CONTACT MAY CAUSE IRRITATION.

INHALATION: MAY CAUSE IRRITATION OF RESPIRATORY SYSTEM, BUT IS HIGHLY UNLIKELY IN NORMAL LAB USE.

INGESTION: MAY CAUSE GASTROINTESTINAL IRRITATION, AND CNS DEPRESSION (DROWSINESS, DIZZINESS, FATIGUE AND VISUAL DISTURBANCES).

CHRONIC EXPOSURE: NO EFFECTS REPORTED.

SENSITIZER: NO EFFECTS REPORTED.

CARCINOGENICITY: NO INGREDIENTS IDENTIFIED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY NTP, IARC OR OSHA

TERATOGENICITY: NO HUMAN DATA REPORTED



Safety Data Sheet

DIAMOND D ULTRA SEP

EMBRYOTOXICITY: NO HUMAN DATA REPORTED

MUTAGENICITY: NO HUMAN DATA REPORTED

PRE-EXISTING CONDITIONS: NO HUMAN DATA REPORTED

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXITY: LAB QUANTITIES ARE NOT EXPECTED TO BE SIGNIFICANT.

DEGRADABILITY: HIGH LEVEL OF BIODEGRADABILITY IS EXPECTED.

BIOACCUMULATION: NOT EXPECTED TO BIO-ACCUMULATE

MOBILITY IN SOIL: EXPECTED TO BE HIGH. COMPONENTS ARE WATER SOLUBLE.

SECTION 13: DISPOSAL INFORMATION

RAGS MAY BE DISCARDED IN TRASH, OR LABORATORY QUANTITIES MAY BE FLUSHED DOWN DRAIN WITH WATER.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER: N/A

SHIPPING NAME: N/A

CLASS: N/A

PACKING GROUP: N/A

MARINE POLLUTANT: N/A

WARNING SYMBOL: N/A

OTHER: MATERIAL IS NOT REGULATED AS HAZARDOUS IN TRANSPORTATION BY US DOT.

SECTION 15: REGULATORY INFORMATION

LABELING: IRRITANT

NFPA RATINGS: HEALTH HAZARD: 1 FIRE & EXPLOSION: 0 REACTIVITY: 0 SPECIAL PROTECTION: A

NATIONAL REGULATIONS:

TSCA: ALL INGREDIENTS ARE LISTED ON THE TSCA INVENTORY

SARA: SARA SECTION 302: EXTREMELY HAZARDOUS SUBSTANCES: NONE LISTED.

SARA SECTION 313: N/A

INAPPLICABLE: TSCA SNUR RULE: NO INGREDIENTS LISTED.

FOREIGN REGULATIONS:

ALL COMPONENTS ARE ON THE EU EINECS INVENTORY LIST AND THE CANADIAN DSL

SECTION 16: OTHER INFORMATION

NO DOT SHIPPING RESTRICTIONS.

PREPARED FOR NATIONAL KEYSTONE BY AMERICAN DENTAL SUPPLY, INC.

EMERGENCY RESPONSE: INFOTRAC 1-800-535-5053, 1-352-323-3500

Revised Sections since Last Version:	
Initial Date: 03/2006	
Revision Date: 06/5/2015	Made 16 Sections, to be GHS compliant



Safety Data Sheet

DIAMOND D ULTRA SEP

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Information contained within this SDS is only to be distributed as required by law.

Section 1. Identification

- GHS product identifier** : Silicone Carbide Rubber Bonded Abrasive Wheels and Points
- Other means of identification** : All Rubber Wheel Items, Rubber Medium Wheels, Rubber Clasp Polisher Items, Ultra Thin Discs, Veri Thin Discs, Ultra Flex, Separating Discs, Knife Edge Wheels, Mizzy Regular Heatless Wheels
- Product code** : Various
- Product type** : Solid.
- Product use** : Laboratory use

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

- Supplier's details** : Keystone Industries
616 Hollywood Ave.
Cherry Hill, NJ 08002
(856) 663-4700

- Emergency telephone number (with hours of operation)** : (800) 535-5053

Section 2. Hazards identification

- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- Classification of the substance or mixture** : CARCINOGENICITY - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 50%

GHS label elements

Hazard pictograms



- Signal word** : Danger

- Hazard statements** : May cause cancer.

Precautionary statements

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing.

- Response** : IF exposed or concerned: Get medical attention.

- Storage** : Store locked up.

- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : All Rubber Wheel Items, Rubber Medium Wheels, Rubber Clasp Polisher Items, Ultra Thin Discs, Veri Thin Discs, Ultra Flex, Separating Discs, Knife Edge Wheels, Mizzy Regular Heatless Wheels

CAS number/other identifiers

CAS number : Not applicable.

May contain one or more of the following components in quantities considered hazardous:

Ingredient name	CAS number	EC number	%
silicon carbide	409-21-2	206-991-8	25 - 50
titanium dioxide	13463-67-7	236-675-5	1 - 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Section 4. First aid measures

- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
silicon carbide	<p>ACGIH TLV (United States, 4/2014). TWA: 10 mg/m³ 8 hours. Form: Inhalable fraction TWA: 0.1 f/cc 8 hours. Form: Respirable fibers: length greater than 5 µm; aspect ratio equal to or greater than 3:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination. TWA: 3 mg/m³ 8 hours. Form: Respirable fraction</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust</p> <p>NIOSH REL (United States, 10/2013). TWA: 5 mg/m³ 10 hours. Form: Respirable fraction TWA: 10 mg/m³ 10 hours. Form: Total</p> <p>OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Respirable</p>

Section 8. Exposure controls/personal protection

titanium dioxide

fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust
ACGIH TLV (United States, 4/2014).TWA: 10 mg/m³ 8 hours.**OSHA PEL 1989 (United States, 3/1989).**TWA: 10 mg/m³ 8 hours. Form: Total dust
OSHA PEL (United States, 2/2013).TWA: 15 mg/m³ 8 hours. Form: Total dust

Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

- : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state

- : Solid.

Color

- : Various

Odor

- : Not available.

pH

- : Not available.

Melting point

- : Not available.

Section 9. Physical and chemical properties

Boiling point	: Not available.
Flash point	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 2 to 4
Solubility	: Very slightly soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Classification

Product/ingredient name	OSHA	IARC	NTP
silicon carbide	-	2A	-
titanium dioxide	-	2B	-

Information on the likely routes of exposure	: Not available.
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Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.

Section 11. Toxicological information

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
titanium dioxide	-	352	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: acrylonitrile
Clean Water Act (CWA) 311: acrylonitrile

Section 15. Regulatory information

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
acrylonitrile	0 - 0.1	Yes.	10000	1488	100	14.9

SARA 304 RQ : 200000000 lbs / 90800000 kg

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
silicon carbide	25 - 50	No.	No.	No.	No.	Yes.
titanium dioxide	1 - 5	No.	No.	No.	No.	Yes.

State regulations

Massachusetts : The following components are listed: SILICON CARBIDE; Red iron oxide; TITANIUM DIOXIDE

New York : None of the components are listed.

New Jersey : The following components are listed: SILICON CARBIDE; Red iron oxide; TITANIUM DIOXIDE; TITANIUM OXIDE (TiO₂)

Pennsylvania : The following components are listed: SILICON CARBIDE (SiC); Red iron oxide; TITANIUM OXIDE (TiO₂)

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
titanium dioxide	Yes.	No.	No.	No.
acrylonitrile	Yes.	No.	Yes.	No.
1,3-butadiene	Yes.	Yes.	Yes.	No.

Canada inventory : All components are listed or exempted.

International regulations

Section 15. Regulatory information

International lists	Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted.
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III Chemicals	: Not listed

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	1
Flammability	0
Physical hazards	0
Personal protection	

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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History

Date of printing	: 6/10/2015
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Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

References

- : Not available.

Indicates information that has changed from previously issued version.

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